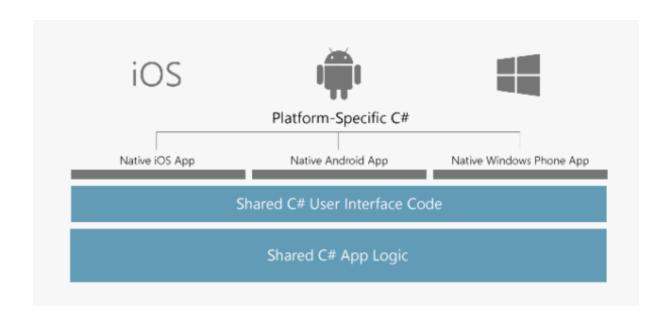


# **Tutorium**

# Xamarin ePortfolio



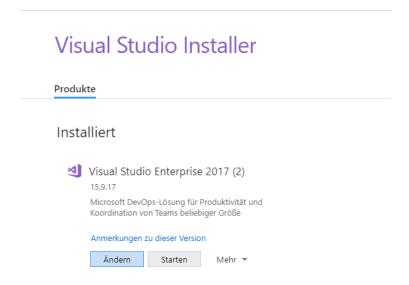
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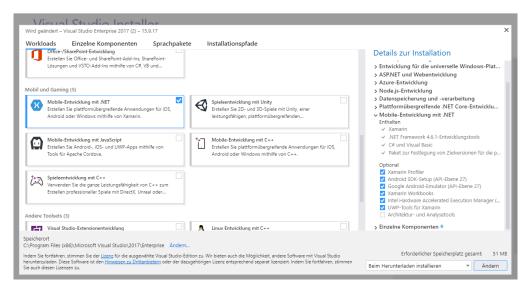


## What you need to start

First of all you need Visual Studio. You can download only the community version but as student you can get the enterprise version in dhbw store technik.



After this you have to download the required packages.

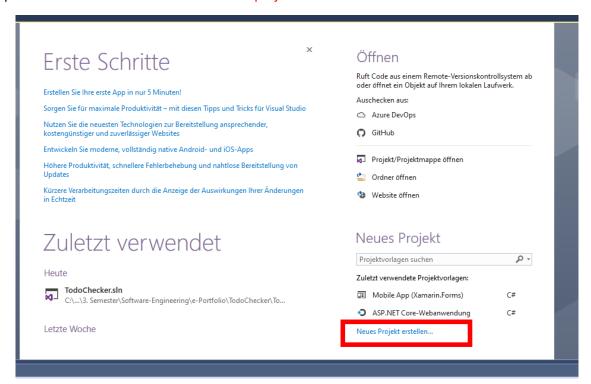


When everything is downloaded and installed we can go to the next topic.



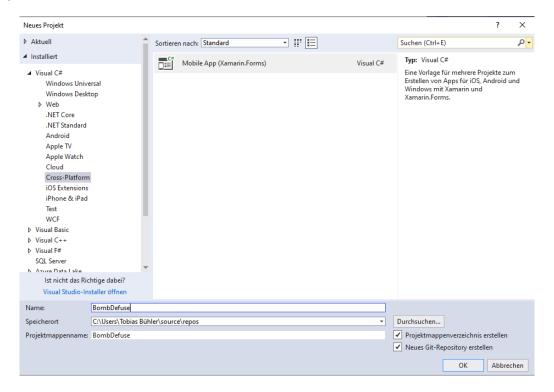
## Create the project

Open Visual Studio and click on create new project.



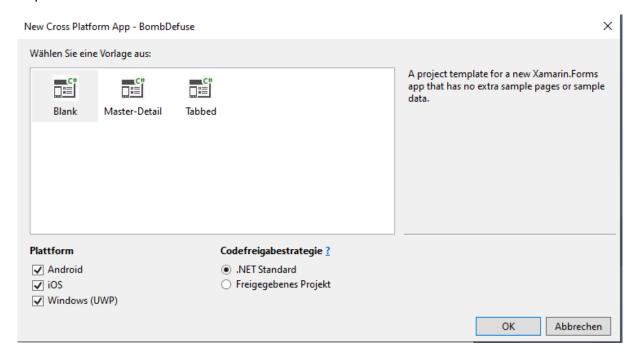
In the following dialog you have to select cross-platform and select mobile-app(xamarin.forms). Change the project name and uncheck create git repo.

#### Click ok.





Now you have to select the App-Layout. Choose the Blank version and be sure that .Net standard and all platforms are selected.

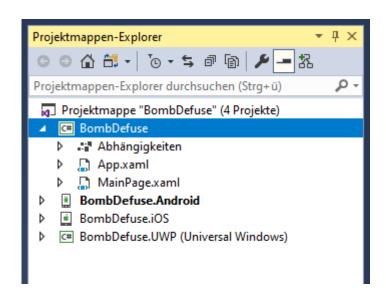


The blank app is a simple single page layout and easy to understand.

With clicking the ok button Visual Studio will build the project. This can take a few seconds (or minutes)...

After the build process we can start programming the app.

The building process provides us with the following project folder structure.



There is the main Xamarin-Project and the folders depending of which platforms we have chosen.

We only need to change the main project and Xamarin will create the changes for the other platforms.

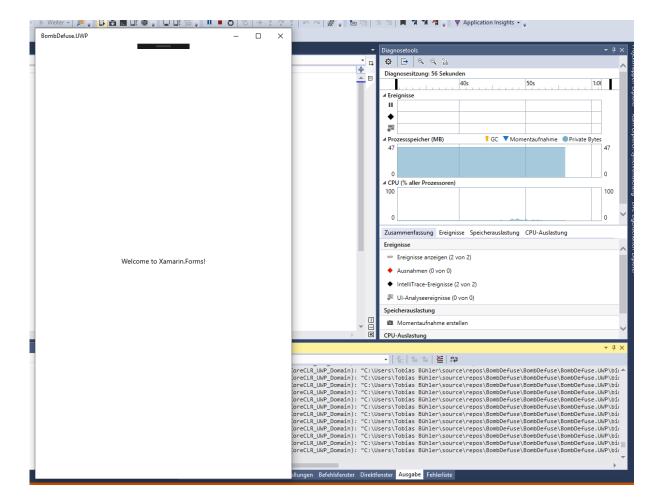


### Lets start programming

The empty app contains a label in the center. The easiest way of testing on windows is using the UWP Emulator. You can also test on android but there are a few problems for example, if the project path is too far from system path there is an error because Xamarin creates many subfolders by debugging and the android emulator can only take 240 chars for the path -.- ...



Select the <projectname>.UWP and start it locally.





#### Designing the Front-End

Designing the app is a little bit like designing a webpage. By adding more tags you can change the content of the app. This must be done in the MainPage.xaml file. The app.xaml file in the project folder automatically sets the MainPage.xaml as start page.

```
MainPage.xaml + X MainPage.xaml.cs
<?xml version="1.0" encoding="utf-8" ?>
            <ContentPage xmlns="http://xamarin.com/schemas/2014/forms"
                         xmlns:x="http://schemas.microsoft.com/winfx/2009/xaml"
                         xmlns:local="clr-namespace:BombDefuse"
                         x:Class="BombDefuse.MainPage">
               <StackLayout>
     8
                   <!-- Place new controls here -->
                   <Label Text="Welcome to Xamarin.Forms!"</pre>
    10
                      HorizontalOptions="Center"
                       VerticalOptions="CenterAndExpand" />
    11
    12
                </StackLayout>
    13
            </ContentPage>
    15
```

#### Programming the Back-End

The MainPage.xaml.cs file contains the Back-End code. The programming language is C#.

```
MainPage.xaml
                   MainPage.xaml.cs → ×
C# BombDefuse
                                                                            s BombDef
      1  using System;
      2
             using System.Collections.Generic;
      3
             using System.Linq;
      4
             using System.Text;
      5
             using System. Threading. Tasks;
      6
            using Xamarin.Forms;
      7

    □ namespace BombDefuse

      8
      9
             {
                 public partial class MainPage : ContentPage
     10
     11
                     public MainPage()
     12
     13
     14
                         InitializeComponent();
     15
     16
     17
            _ }
     18
```

For final code have a look into the git repository...